

130-051-6357-A

FORD RECONNAISSANCE

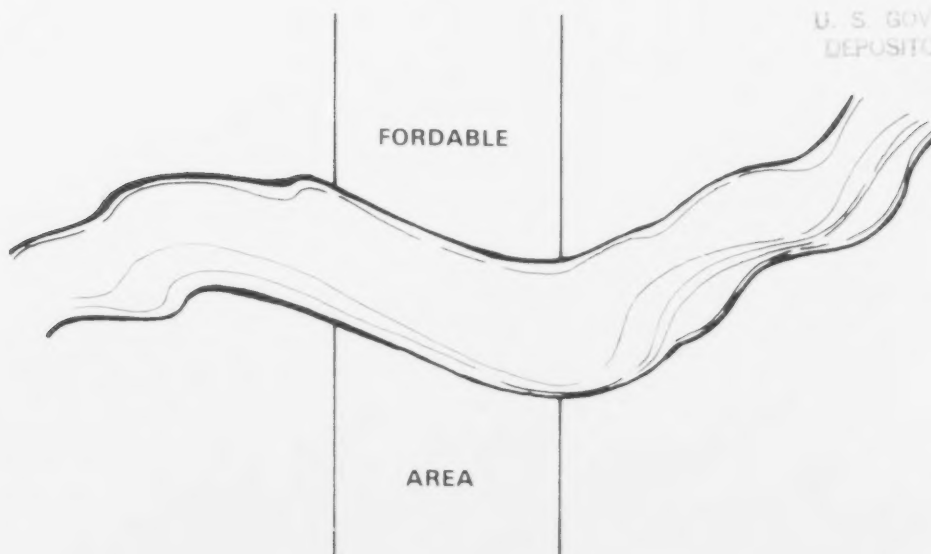
Part II

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TEC LESSON 030-051-6357-A

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PRODUCED BY
UNITED STATES ARMY
ENGINEER SCHOOL
FORT BELVOIR, VIRGINIA 22060



STUDENT/SUPERVISOR INSTRUCTIONS, PRETEST/POSTTEST,
AND ANSWER KEY ARE CONTAINED IN THIS BOOK.

REVISED
JUNE 1985

D101.6/7:

**READ THE STUDENT/SUPERVISOR INSTRUCTIONS
CAREFULLY. BE SURE YOU UNDERSTAND THEM
COMPLETELY BEFORE BEGINNING THE LESSON.
PLEASE DO NOT WRITE IN THIS BOOK.**

The words "he," "his," and "men," when used in this publication, represent both the masculine and feminine genders, unless otherwise specifically stated.

STUDENT/SUPERVISOR INSTRUCTIONS

TYPE OF LESSON

- Ford Reconnaissance

AUDIENCE

- MOS 12B—Combat Engineer
- Skill Levels One and Two

TRAINING OBJECTIVES

Soldiers completing this lesson will be able to:

- Prepare DA Form 1251, Ford Reconnaissance Report.
- Prepare a Ford Recon Symbol.

MATERIAL/EQUIPMENT/PERSONNEL REQUIRED

- Pencil and Paper
- DA Form 1251

TIME REQUIRED

- Individual: 60 minutes
- Group: 75 minutes

REFERENCES

- FM 5-34
- FM 5-36

STUDENT/SUPERVISOR INSTRUCTIONS

STUDENT INSTRUCTIONS

- Prerequisites: TEC Lesson 030-051-6356-A
- Take the Pretest/Posttest. If you pass, you do not have to take the lesson.
- Make sure you have the material, equipment, and personnel required to complete the lesson.
- Take the lesson.
- When you complete this lesson, take the Pretest/Posttest again. If you do not pass, take the lesson again.

SUPERVISOR INSTRUCTIONS

- Make sure students have completed the prerequisites listed in the Student Instructions.
- Administer the Pretest/Posttest to determine need for the lesson. If only one soldier is being tested, the test may be taken directly from the book, with response made on a separate sheet of paper. If more than one soldier is being tested, reproduce the test for direct use. To pass the test, a soldier must answer 100% of the items correctly.
- Make sure students have the material, equipment, and personnel required to complete the lesson.
- Administer the lesson to students who do not pass the Pretest/Posttest.
- Administer the Pretest/Posttest to students who complete the lesson. Those who do not pass must take the lesson again.

PRETEST/POSTTEST

TEC LESSON 030-051-6357-A Ford Reconnaissance Part II

This test consists of two parts that cover every training objective of the lesson. These parts have a total value of 100 points. When you have completed the test, check your answers against the Pretest/Posttest Answer Key. If you do not score 100 points, you must take the lesson—or take it again if you have already taken it. If you are taking the test directly from the instruction book, write your answers on a separate sheet of paper.

1. Read the following ford reconnaissance. Use this information to prepare DA Form 1251, Ford Reconnaissance Report.

On 11 July 1978, SSG W.L. Gibbs, from HHD, 565th Engineer Bn, did a Ford Reconnaissance (Ford #2) located on Rt. 507 WA North/South between Sunnysdale and South Union, Washington, U.S.A. This reconnaissance was ordered by CDR, 565th Engineer Bn (S-2). The map showing the area that was reconnoitered is from the map series V797, sheet number 1477 IV, type 1:50,000 EG. The coordinates are EG 068925. The initial starting point is EG 025898 and the point of termination is EG 073951. The nearest town to this area is South Union, Washington. The town is located north of the area reconnoitered, with a distance of 5.9 km between the two locations. The name of the stream located in the immediate area is Beaver Creek. The stream flows west to east. The recon was to be completed no later than 112000Z July 78. SSG Gibbs signed the completed report on 111800Z July 78.

The overall width of the stream from bank to bank is 10.1 meters. The stream has a width of 7.1m, a depth of 0.9m, and a velocity of 1.5 mps on 11 July 78. This was during the summer season. You went back and took the low water level on 12 Sept. 78. At that time the width was 5.8m, the depth 0.5m, and the velocity 0.8 mps. The mean for the creek is 7.1m wide, 0.9m deep, and a velocity of 2.1 mps. The high width for the creek is 8.3m, at which time the depth was 1.4m, and the velocity was 2.4 mps.

Your crew reported that the bottom of Beaver Creek is made up of gravel. The slope ratio of the creek banks is 10%. The usable width of the creek is 7.8m. There is a large rock between the entrance and exit of the ford site. The best way to avoid it is to go around it on the downstream side. Any hazards are unknown. The approaches to the creek are a bituminous pavement. It was also noted that no depth gauge was used in measuring the depth of the creek.

2. On a separate piece of paper prepare a ford reconnaissance symbol using this information.

INTRODUCTION

As NCOIC of a ford reconnaissance party, you are responsible for preparing DA FORM 1251, Ford Reconnaissance Report and the Ford Reconnaissance Symbol. DA Form 1251 provides your supervisor with a permanent record of ford information.

In this lesson you have two steps:

1. Prepare DA Form 1251, Ford Reconnaissance Report.
2. Prepare a ford reconnaissance symbol.

1) PREPARE DA FORM 1251:

In this section you will learn to prepare DA FORM 1251, Ford Reconnaissance Report. This report consists of the following sections:

Front Sections: Items 1-18

- Heading
- Identification
- Characteristics of Crossing
- Description
- Remarks

Back Sections: Items 19-21

- Profile View Sketch
- Plan View Sketch
- Remarks

You are now ready to begin.

1) PREPARE DA FORM 1251 (Cont.):

Heading

The HEADING is always the first section you prepare.

In this section you record general information about the ford reconnaissance. Get this information from the mission directive.

Turn the page to learn what to write in each block of the HEADING. . .

Heading (Cont.)

PORD RECONNAISSANCE REPORT (Form 8-36)		DATE
TO: (Headquarters ordering reconnaissance)	FROM: (Name, grade and unit of reconnaissance officer)	
2	3	

Study these directions for preparing the Heading:

1. Record the date you submit the report.
2. Enter the higher headquarters ordering the reconnaissance.
3. Print your name and unit.

1) PREPARE DA FORM 1251 (Cont.):

Identification

In this section you record geographic information which identifies the ford.

Transfer this information from the notes you took during the reconnaissance and from maps.

Let's proceed.

Identification (Cont.)

1. ROUTE NUMBER 4	2. FROM (Initial Point) 5	3. TO (Terminal Point) 6	4. DATE/TIME (of signature) 7
5. MAP SERIES NUMBER	6. SHEET NUMBER	7. GRID REFERENCE	
		TYPE	COORDINATES
8. LOCATION FROM NEAREST TOWN			9. FORD NUMBER
DISTANCE	DIRECTION	NAME OF NEAREST TOWN	10. CROSSING (Name of stream or other body of water)

Study these directions for preparing the IDENTIFICATION sections:

4. Record the highway number.
5. Record the beginning grid coordinates of the route, road, or engineer recon.
6. Record the ending grid coordinates of the route, road, or engineer recon.
7. Record the date and time you completed the reconnaissance.

Identification (Cont.)

1. ROUTE NUMBER	2. FROM (Initial Point)	3. TO (Terminal Point)	4. DATE/TIME (Of signature)
5. MAP SERIES NUMBER 8	6. SHEET NUMBER 9	7. GRID REFERENCE TYPE 10 COORDINATES 11	9. FORD NUMBER 12
8. LOCATION FROM NEAREST TOWN DISTANCE DIRECTION NAME OF NEAREST TOWN			10. CROSSING (Name of stream or other body of water)

8. Record the map series number.
9. Record the map sheet number.
10. Record the scale of the map.
11. Record the grid coordinates of the ford.
12. Assign an identifying number to the ford. Record that number in this space.

Identification (Cont.)

FORD RECONNAISSANCE REPORT (FM 1-56)				DATE
TO: (Headquarters ordering reconnaissance)		FROM: (Name, grade and unit of reconnaissance officer)		
1. ROUTE NUMBER	2. FROM (Initial Point)	3. TO (Terminal Point)	4. DATE/TIME (Of signature)	
5. MAP SERIES NUMBER	6. SHEET NUMBER	7. GRID REFERENCE TYPE COORDINATES		8. FORD NUMBER
9. LOCATION FROM NEAREST TOWN				10. CROSSING (Name of stream or other body of water)
DISTANCE 13	DIRECTION 14	NAME OF NEAREST TOWN 15		16

13. Record the distance from the ford to the nearest town.
14. Record the direction from the nearest town to the ford.
15. Record the name of the nearest town.
16. Record the name of the body of water you are fording.

1) PREPARE DA FORM 1251 (Cont.):

Characteristics of Crossing

In this section record the fording site dimensions obtained during the ford reconnaissance.

Transfer this data from your notes taken during the reconnaissance.

Turn the page and take a closer look at this section.

Characteristics of Crossing (Cont.)

11. CHARACTERISTICS OF CROSSING					
WATER LEVELS	WIDTH	DEPTH	VELOCITY	DATE	SEASON OR MONTH(S)
TODAY	←	17	→	18	19
LOW					
AVERAGE					
HIGH					

Study these directions for preparing the CHARACTERISTICS OF CROSSING section:

17. Record the stream's WIDTH, DEPTH, and VELOCITY for the day of your reconnaissance.
18. Record the DATE you obtain those dimensions.
19. Record in what SEASON or MONTH you obtain these dimensions.

Characteristics of Crossing (Cont.)

11. CHARACTERISTICS OF CROSSING					
WATER LEVELS	WIDTH	DEPTH	VELOCITY	DATE	SEASON OR MONTH(S)
TODAY					
LOW	←	20	→	21	22
MEAN					
HIGH					

20. Record the lowest WIDTH and DEPTH of the crossing and the VELOCITY for the stream.
21. Record the DATE these dimensions occurred if you actually take the measurements. Leave this item blank if you obtain the dimensions from local records or other sources.
22. Record in which SEASON or MONTH these dimensions occurred if you actually take the measurements. Leave this item blank if you obtain the dimensions from local records or other sources.

Characteristics of a Crossing (Cont.)

WATER LEVELS	WIDTH	DEPTH	VELOCITY	DATE	SEASON OR MONTH(S)
TODAY					
LOW					
MEAN					
HIGH	← 23 →			24	25

23. Record the highest WIDTH and DEPTH of the crossing and the VELOCITY for the stream.
24. Record the DATE these dimensions occurred if you actually take the measurements. Leave this item blank if you *estimate* these dimensions.
25. Record the SEASON or MONTH these dimensions occurred if you actually take the measurements. Leave this item blank if you *estimate* the dimensions.

Characteristics of Crossing (Cont.)

11. CHARACTERISTICS OF CROSSING					
WATER LEVELS	WIDTH	DEPTH	VELOCITY	DATE	SEASON OR MONTH(S)
TODAY	8.3				
LOW	6.1				
MEAN	7.3 ← 26 →			27	28
HIGH	8.6				

26. Record the *mean* of the following dimensions:

- WIDTH
- DEPTH
- VELOCITY

Record the usual values of the depth, width, and velocity as the mean.

27. Leave this column blank.

28. Leave this column blank.

1) PREPARE DA FORM 1251 (Cont.):

Description

In this section you record the fording site physical characteristics obtained during the reconnaissance.

You transfer this information from your notes taken during the reconnaissance.

Turn the page and proceed.

Description (Cont.)

12. BOTTOM ☐ SAND ☐ GRAVEL ☐ STONE ☐ OTHER (Specify): 29		13. APPROACHES ☐ FIRM ☐ SOFT ☐ PAVED 30	14. SLOPE RATIO 31
15. TYPE OF PAVEMENT	16. USABLE WIDTH	17. HAZARDS (Flash floods, quickeand, etc.)	

Study these directions for preparing the DESCRIPTION section:

- 29. Check the box describing the composition of the stream bottom.
- 30. Check the box describing the composition of the approach.
- 31. Record the percent of slope of the approaches.

Description (Cont.)

15. TYPE OF PAVEMENT 32	16. USABLE WIDTH 33	17. HAZARDS (<i>Flash floods, quicksand, etc.</i>) 34
----------------------------	---------------------------	--

32. Record the type of pavement (if any) of approaches and ford.
33. Record the **usable width** of approaches and ford.
34. Record any hazards, such as flash floods or quicksand, which would affect the trafficability of the ford. If there are no hazards, enter NONE.

Remarks

REMARKS (*Description of Approach Roads, Guide Markers, Depth Gages, etc.*)

— 35 —

DA FORM 1251

35. In this section record any important information about the ford not mentioned elsewhere on the form, such as:
- Descriptions of approach roads
- Guide markers
- Depth gauges
- Availability of, and distance to, bypasses and alternate crossings

That's it for the front sections of this form. Turn the page for some practice.

PRACTICE EXERCISE:

Take out a blank DA Form 1251. Use the following information to prepare the front sections of DA Form 1251.

WHEN YOU COMPLETE THIS PRACTICE EXERCISE, KEEP YOUR COMPLETED DA FORM 1251 FOR THE NEXT PRACTICE EXERCISE.

On 11 Jul 1978, SSG W.L. Gibbs, from HHD 565th Engineer Bn, did a Ford Reconnaissance (Ford #1) on route 507, Washington. This reconnaissance was ordered by CDR, 565th Engineer Bn (S-2). The map showing the area that was reconnoitered is from the map series V791, sheet number 1477 IV, type EG 1:50,000. The coordinates are EG 035855. The starting point of the recon is EG 025898 and the point of termination is EG 073951. The nearest town to this area is Sunnysdale, Washington. The town is northeast of the area reconnoitered, with a distance of 2.0 km between the two. The name of the stream located in the area is Scatter Creek. It flows from northwest to southeast. The recon was to be completed no later than 112000Z July 78.

Scatter Creek, the crossing being reconnoitered, has a width of 8.2m, a depth of 1.1m, and a velocity of 1.8 mps on 11 July 78. The season at this checking was summer. The low water level was taken on 12 Sept. 78. At that time, the width was 7.4m, the depth 0.7m, and the velocity 1.2 mps. The mean for the creek is 8.2m in width, 1.0m in depth, and a velocity of 2.6 mps. The high width for the creek is 9.3m, at which time the depth was 1.9m, and the velocity was 3 mps. At the high water level, the stream width was to the edge of both banks (bank-to-bank distance of 9.3m).

It was reported that the bottom of Scatter Creek is made up of gravel. The slope ratio of the creek banks are 15%. The usable width of the creek is 9.3m. The hazards are unknown. The approaches to the creek are concrete pavement.

Remarks that were noted on the report state that at the time of the recon no depth gauge was used in measuring the depth of the creek. It was also noted that the nearest bypass is located southwest approximately 400 meters.

CHECK YOUR ANSWERS:

FORD RECONNAISSANCE REPORT (FM 1-12)						DATE 11 JULY 1978
1. TO: (Organization, address, and telephone number) CDR, 565 ENGINEER BN S-2			2. FROM: (Name, grade and unit of reconnaissance officer) SSG. W.L. GIBBS HHD 565 ENGINEER Bn.			
3. ROUTE NUMBER RT. 507, WASH.	4. FROM: (Sheet Point) EG 025898	5. TO: (Sheet Point) EG 073961	6. DATE TIME (If signature) 112000Z JULY 78			
7. MAP GRID NUMBER V791	8. SHEET NUMBER 1477 IX	9. GRID REFERENCE 1:50,000 EG 035885	10. FORD NUMBER			
11. LOCATION FROM NEAREST TOWN 2.0 km SOUTHWEST SUNNYDALE, WASH SCATTER CREEK						
12. CHARACTERISTICS OF CROSSING						
WATER LEVEL	WIDTH	DEPTH	VELOCITY	DATE	REASON OR MONTHLY	
LOW	8.2m	1.1m	1.8 mps	11 JULY 1978	SOMMER	
HIGH	7.4m	0.7m	1.2 mps	12 SEPT. 78		
LOW	8.2m	1.0m	2.6 mps			
HIGH	9.3m	1.9m	3 mps			
13. APPROACHES ☐ SAND ☒ GRAVEL ☐ STONE ☐ OTHER (specify)			14. SLOPE RATIO 15%			
15. TYPE OF PAVEMENT CONCRETE			16. GULCH 9.3m			
17. HAZARDS (Flood, debris, etc.)			18. UNKNOWN			
19. REMARKS (Description of Approach Roads, Guide Markers, Depth Gages, etc.) NO DEPTH GAGE USED; NEAREST BYPASS LOCATED SOUTHWEST APPROXIMATELY 400 METERS.						

DA FORM 1251

If you had difficulty with this exercise, review the last section of this lesson and repeat the exercise.

If you had no problems, turn the page and learn how to prepare Items 19-21, the back sections of DA Form 1251.

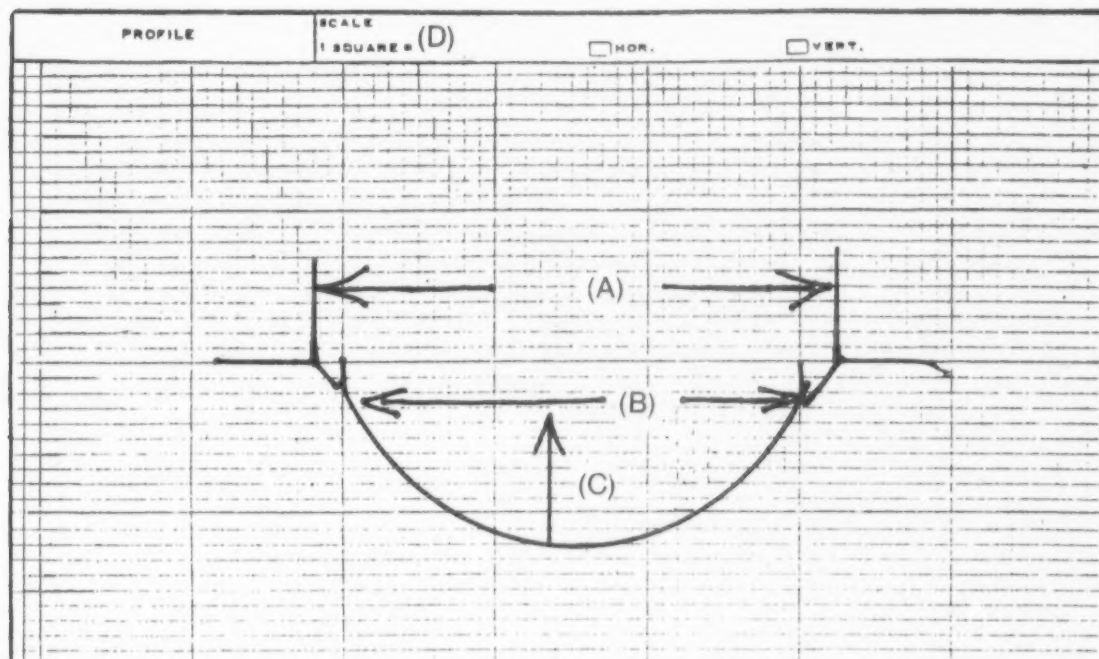
1) PREPARE DA FORM 1251 (Cont.):

Sketches

In this section draw the profile and site plan of the ford. On the sketches record the dimensions you obtained during the ford reconnaissance.

Turn the page to learn more about the individual sketches.

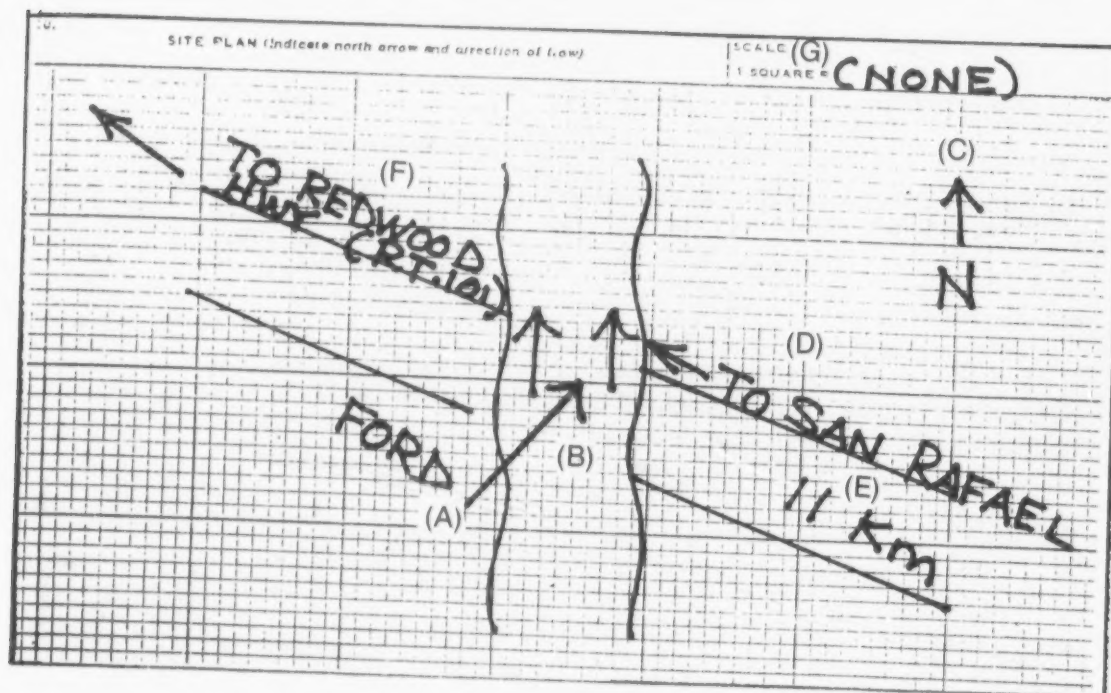
Sketches (Cont.)



The PROFILE VIEW is the side view of the ford indicating the water level and elevation of the stream bottom. Study the dimensions to include in your PROFILE VIEW SKETCH:

- (A) Record the overall width from edge of bank to edge of bank.
- (B) Record the actual width of the water.
- (C) Record the depth of the water at the time of the recon.
- (D) Since you are not required to draw this sketch to scale, write NONE in this section.

Sketches (Cont.)



The SITE PLAN is the overhead view of the stream. Include the following in your SITE PLAN sketch:

- (A) Draw an arrow showing the fording area. Label it FORD.
- (B) Draw arrows showing the direction of the flow of the stream.
- (C) Label NORTH direction.
- (D) Record the nearest town. In the diagram above the closest town is San Rafael.
- (E) Record the distance from the nearest town to the ford site. In the diagram above the distance from San Rafael is 11 km.
- (F) Record the name and number of the route that crosses the ford. In the diagram above the closest route is Redwood Hwy, Rt. 101.
- (G) Write NONE in this section since you do not use a scale for this sketch.

Sketches (Cont.)

21. REMARKS (Attach photograph)

NONE

REMARKS:

In this section include any pertinent information you do not mention elsewhere in the report. Attach appropriate photographs if available. If there is no additional information, write NONE.

Turn the page to practice.

PRACTICE EXERCISE:

Take out the DA Form 1251 you began preparing in the last practice exercise. Given the following ford reconnaissance information, prepare Items 19-21 on DA Form 1251.

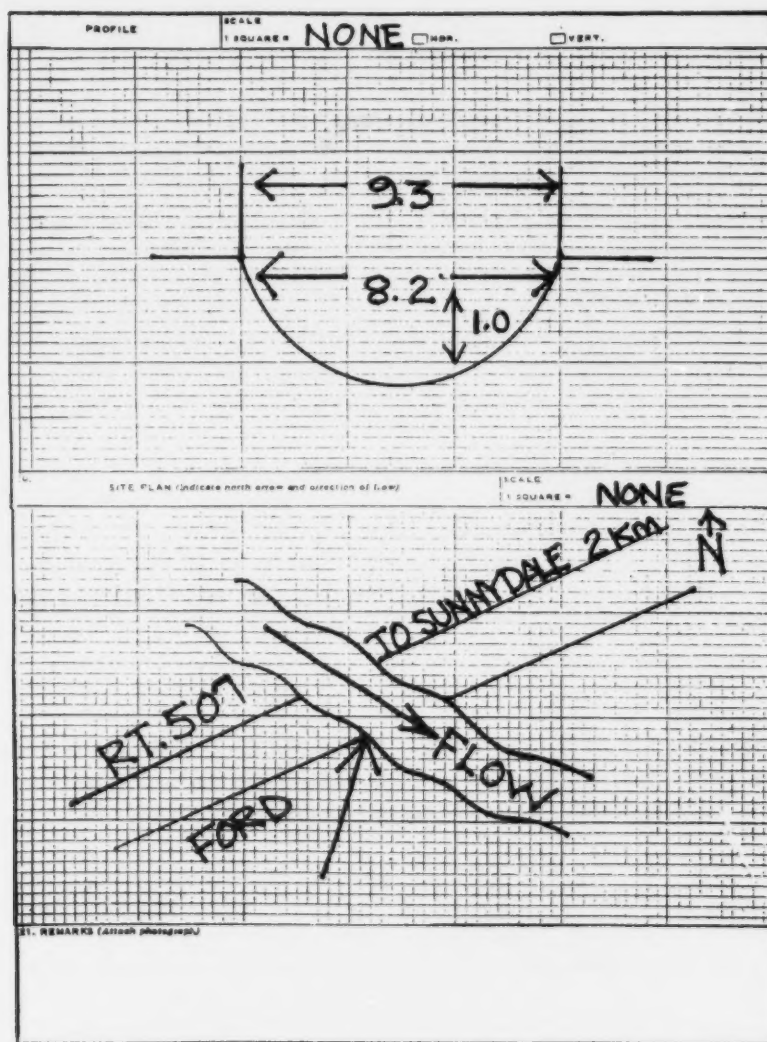
On 11 Jul 1978, SSG W.L. Gibbs, from HHD 565th Engineer Bn, did a Ford Reconnaissance (Ford #1) on route 507, Washington. This reconnaissance was ordered by CDR, 565th Engineer Bn (S-2). The map showing the area that was reconnoitered is from the map series V791, sheet number 1477 IV, type EG 1:50,000. The coordinates are EG 035855. The starting point of the recon is EG 025898 and the point of termination is EG 073951. The nearest town to this area is Sunnysdale, Washington. The town is northeast of the area reconnoitered, with a distance of 2.0 km between the two. The name of the stream located in the area is Scatter Creek. It flows from northwest to southeast. The recon was to be completed no later than 112000Z July 78.

Scatter Creek, the crossing being reconnoitered, has a width of 8.2m, a depth of 1.1m, and a velocity of 1.8 mps on 11 July 78. The season at this checking was summer. The low water level was taken on 12 Sept. 78. At that time, the width was 7.4m, the depth 0.7m, and the velocity 1.2 mps. The mean for the creek is 8.2m in width, 1.0m in depth, and a velocity of 2.6 mps. The high width for the creek is 9.3m, at which time the depth was 1.9m, and the velocity was 3 mps. At the high water level, the stream width was to the edge of both banks (bank-to-bank distance of 9.3m).

It was reported that the bottom of Scatter Creek is made up of gravel. The slope ratio of the creek banks are 15%. The usable width of the creek is 9.3m. The hazards are unknown. The approaches to the creek are concrete pavement.

Remarks that were noted on the report state that at the time of the recon no depth gauge was used in measuring the depth of the creek. It was also noted that the nearest bypass is located southwest approximately 400 meters.

CHECK YOUR ANSWER:



You have completed the first step in this lesson. When you are ready, proceed to STEP TWO.

2) PREPARE THE FORD RECONNAISSANCE SYMBOL :

The ford reconnaissance symbol is a standard code containing all the fording site dimensions and physical characteristics. Your supervisor uses this symbol on his route overlay.

In this section you will learn how to draw the symbol. Then you will record the following classification data:

- A. Ford identification number
- B. Type of ford
- C. Stream velocity
- D. Seasonal limiting factors
- E. Normal length of the ford
- F. Normal width of the ford
- G. Composition of the streambed
- H. Normal depth of water

On the job you prepare the symbol on a separate piece of paper and hand it to your supervisor with the completed DA Form 1251.

2) PREPARE THE FORD RECONNAISSANCE SYMBOL (Cont.):

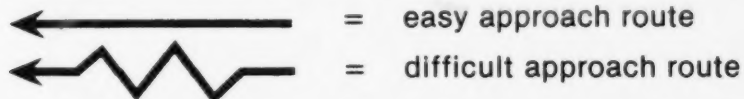


First you draw the symbol.

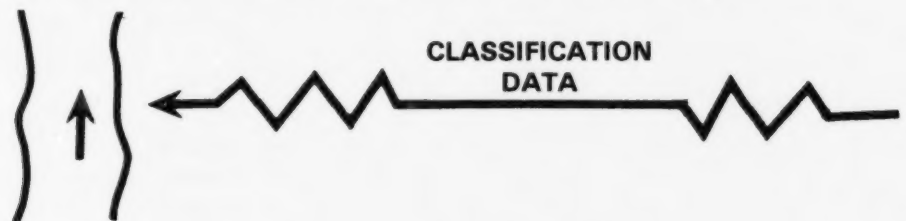
Match the letters in the symbol above with the following descriptions:

(A) Draw a sketch of the stream with an arrow recording the direction of the flow. You can place this drawing on either side of the symbol. In the example above, the stream is to the left.

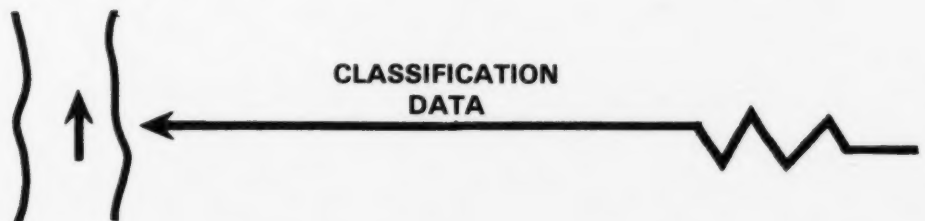
(B) Record a sketch of the type of approach route. Use one of the following symbols:



If the stream has difficult approach routes on **both** sides, record the classification data between the difficult approach symbols. Your symbol should look like this:



If the stream has a difficult approach route on the **right bank** only, your symbol should look like this:



2) PREPARE THE FORD RECONNAISSANCE SYMBOL (Cont.):

Study the following ford classification data to include on your symbol.



Match the letters in the above symbol with the following descriptions. The numbers in the symbol represent actual ford dimensions. Observe that all elements of the symbol are separated by slashes (/). If you do not know an item in the symbol, place a question mark (?) in the appropriate space.

- (C) Assign a **serial number** to the ford. The identification number in the symbol above is 1.
- (D) Record the **type of ford** using the following symbols:

P — Pedestrian
V — Vehicle

Refer to the TRAFFICABILITY OF FORDS Table in FM 5-34 to determine the type of traffic that can use this ford. Use the mean depth of water, the mean velocity, and the slope to determine the type of ford. Both pedestrians and vehicles can use the ford in this diagram.

- (E) Record the **normal velocity** of the stream expressed in meters per second. The velocity of the stream in the symbol above is 2.5

Turn the page to continue. . .

2) PREPARE THE FORD RECONNAISSANCE SYMBOL (Cont.):



(F) Record the **seasonal limiting factors**. The following symbols are used:

X = No seasonal limitation except for sudden flooding of limited duration.

Y = Significant seasonal limitations

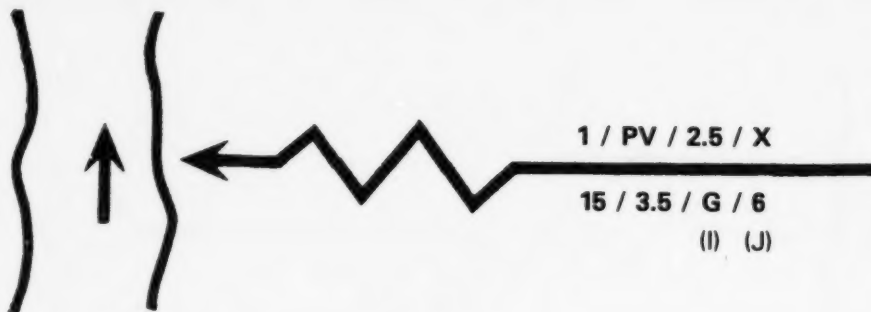
There are no significant seasonal limitations in the symbol above.

(G) Record the **length of the ford** (overall width from bank to bank) in meters. The length of the ford in the symbol above is 15 meters.

(H) Record the usable **width of the ford** in meters. This is the narrowest part of the approach bank. The usable width of the ford in the symbol above is 3.5 meters.

Turn the page to continue. . .

2) PREPARE THE FORD RECONNAISSANCE SYMBOL (Cont.):



(I) Record the **composition of the streambed** using one of the following symbols:

M — MUD

G — GRAVEL

C — CLAY

R — ROCK

S — SAND

P — ARTIFICIAL PAVING

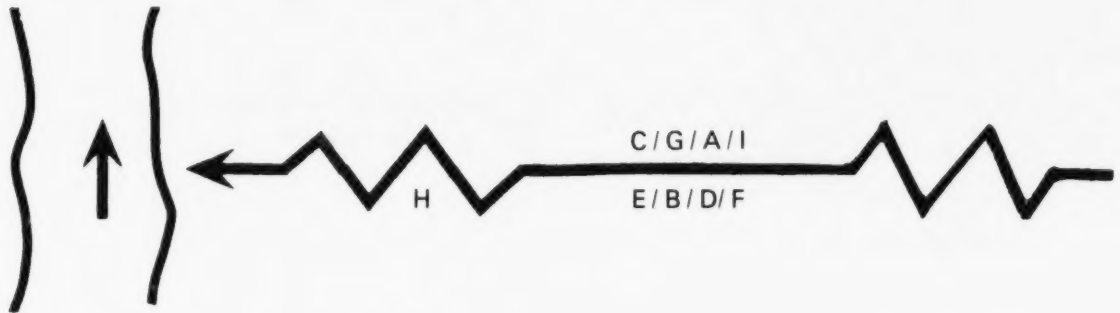
The composition of the streambed in the symbol above is gravel.

(J) Record the **normal depth of the water** at the deepest point. Record this dimension in meters. The normal depth of the water in the symbol above is 6 meters.

Turn the page for some practice.

PRACTICE EXERCISES:

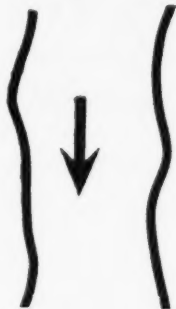
Number your paper 1 through 10. Place the letter next to the appropriate dimension.



1. Width _____
2. Seasonal limiting factors _____
3. Length _____
4. Stream velocity in meters per second _____
5. Difficult approach on the left bank _____
6. Composition of streambed _____
7. Normal water depth _____
8. Serial Number _____
9. Type of ford _____
10. Difficult approach on the right bank _____

PRACTICE EXERCISES (Cont.):

11. Where do you draw the ford recon symbol in relation to the drawing of the stream?
- A. Right
 - B. Left
 - C. Either side
 - D. Due north
12. Suppose the left bank of the stream has a difficult approach. Draw a ford reconnaissance symbol indicating the situation.



Turn the page to check your answers.

CHECK YOUR ANSWERS:

1. Width B
2. Seasonal limiting factors I
3. Length E
4. Stream velocity in meters per second A
5. Difficult approach on left bank H
6. Composition of streambed D
7. Normal water depth F
8. Serial number C
9. Type of ford G
10. Difficult approach on right bank J
11. C. You draw the ford reconnaissance symbol on either side of the stream drawing.

12.



If you had no difficulty with these exercises, turn the page for more practice.

PRACTICE EXERCISES (Cont.):

13. Prepare a ford reconnaissance symbol with this information:

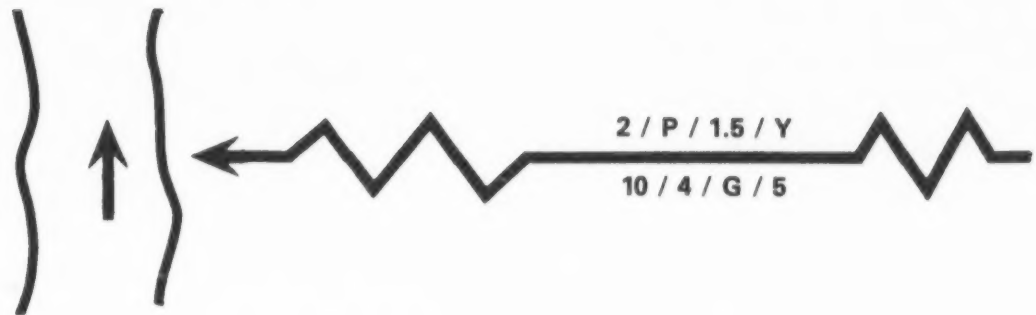
- Ford number: 2
- Pedestrian traffic
- Stream velocity: 1.5m/sec
- Seasonal limitations
- Length: 10m
- Width: 4m
- Gravel bottom
- Depth: 5m
- Difficult approach, both banks
- Stream flows north

14. Prepare a ford reconnaissance symbol with this information:

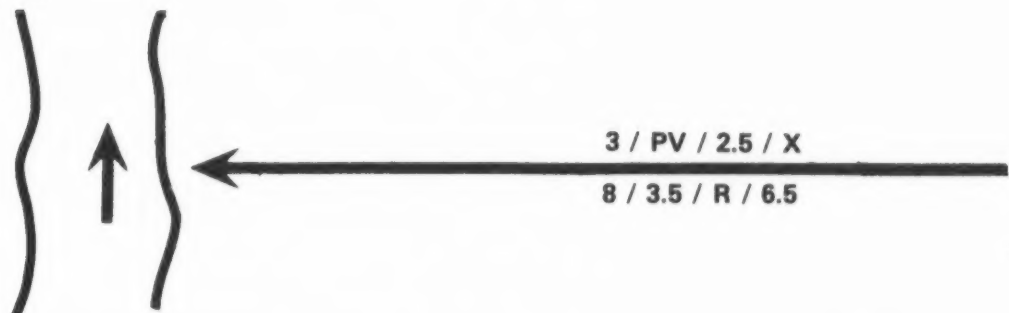
- Ford number: 3
- Pedestrian and vehicle traffic
- Stream velocity: 2.5m/sec
- No seasonal limitations
- Length: 8m
- Width: 3.5m
- Rock bottom
- Depth: 6.5m
- Easy approach, both banks
- Stream flows north

CHECK YOUR ANSWERS:

13.



14.



Congratulations! You have now completed Step 2 and this lesson. At this time review any sections of which you are unsure.

When you're ready, ask for the lesson test.

INTENTIONALLY
BLANK

PRETEST/POSTTEST ANSWER KEY

All parts must be completed as shown to achieve a passing score of 100 points.

1. DA Form 1251 (front and back).

DA Form 1251

1. ROUTE NUMBER CDR, 665 Engt. Bn.										2. FROM (Initial Point) EG 025898										3. TO (Terminal Point) EG 073851										4. DATE/TIME (of signature) 111800ZJul78									
5. MAP SERIES NUMBER 4797										6. SHEET NUMBER 1477 IV										7. GRID REFERENCE EG 068925										8. FORD NUMBER 2									
9. LOCATION FROM NEAREST TOWN South Union, WA										10. CROSSING (Name of stream or other body of water) Beaver Creek										11. CHARACTERISTICS OF CROSSING										12. TYPE OF PAVEMENT Bituminous									
13. APPROACHES ☐ PAVED ☐ GRAVEL ☐ SOFT										14. SLOPE RATIO 10%										15. TYPE OF PAVEMENT Bituminous										16. USABLE WIDTH 7.8m									
17. HAZARDS (Potholes, Quicksand, etc.)										18. USABLE WIDTH 7.8m										19. TYPE OF PAVEMENT Bituminous										20. USABLE WIDTH 7.8m									
21. TYPE OF PAVEMENT Bituminous										22. USABLE WIDTH 7.8m										23. TYPE OF PAVEMENT Bituminous										24. USABLE WIDTH 7.8m									
25. TYPE OF PAVEMENT Bituminous										26. USABLE WIDTH 7.8m										27. TYPE OF PAVEMENT Bituminous										28. USABLE WIDTH 7.8m									
29. TYPE OF PAVEMENT Bituminous										30. USABLE WIDTH 7.8m										31. TYPE OF PAVEMENT Bituminous										32. USABLE WIDTH 7.8m									
33. TYPE OF PAVEMENT Bituminous										34. USABLE WIDTH 7.8m										35. TYPE OF PAVEMENT Bituminous										36. USABLE WIDTH 7.8m									
37. TYPE OF PAVEMENT Bituminous										38. USABLE WIDTH 7.8m										39. TYPE OF PAVEMENT Bituminous										40. USABLE WIDTH 7.8m									
41. TYPE OF PAVEMENT Bituminous										42. USABLE WIDTH 7.8m										43. TYPE OF PAVEMENT Bituminous										44. USABLE WIDTH 7.8m									
45. TYPE OF PAVEMENT Bituminous										46. USABLE WIDTH 7.8m										47. TYPE OF PAVEMENT Bituminous										48. USABLE WIDTH 7.8m									
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93. TYPE OF PAVEMENT Bituminous										94. USABLE WIDTH 7.8m										95. TYPE OF PAVEMENT Bituminous										96. USABLE WIDTH 7.8m									
97. TYPE OF PAVEMENT Bituminous										98. USABLE WIDTH 7.8m										99. TYPE OF PAVEMENT Bituminous										100. USABLE WIDTH 7.8m									

1. Large rock between entrance and exit. Best way to avoid is go around it on the downstream side.

2. No depth gauge

11. CHARACTERISTICS OF CROSSING

12. TYPE OF PAVEMENT

13. APPROACHES

14. SLOPE RATIO

15. TYPE OF PAVEMENT

16. USABLE WIDTH

17. HAZARDS (Potholes, Quicksand, etc.)

18. USABLE WIDTH

19. TYPE OF PAVEMENT

20. USABLE WIDTH

21. TYPE OF PAVEMENT

22. USABLE WIDTH

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95. TYPE OF PAVEMENT

96. USABLE WIDTH

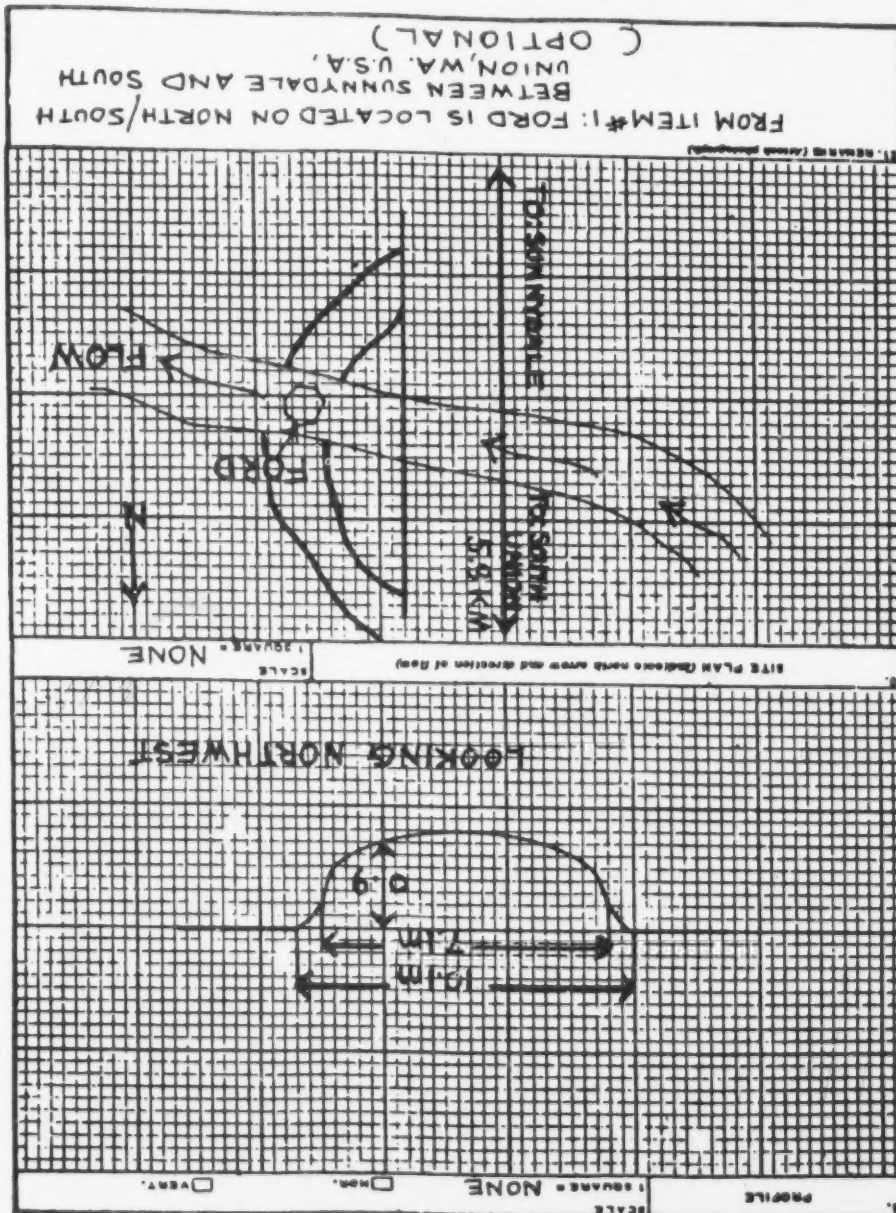
97. TYPE OF PAVEMENT

98. USABLE WIDTH

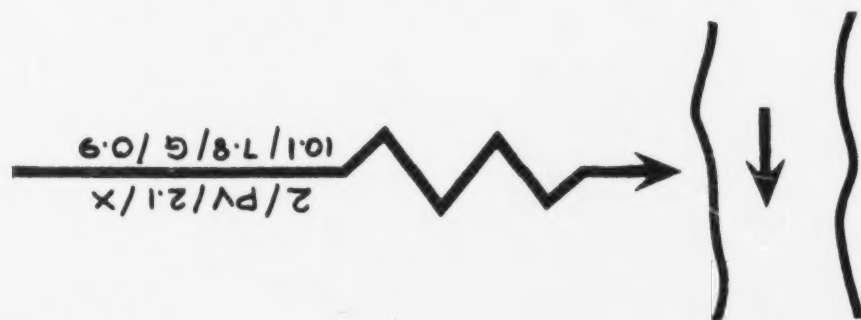
99. TYPE OF PAVEMENT

100. USABLE WIDTH

PRETEST/POSTTEST ANSWER KEY



PRETEST/POSTTEST ANSWER KEY



2. Ford reconnaissance symbol.

